Fall 9-1-2018

# BIOH 108.01: Basic Anatomy

Kins W. Loree
*University of Montana - Missoula*, kins.loree@umontana.edu

# MISSOULA COLLEGE COURSE: BIO H-108, Basic Anatomy

**SEMESTER:**

**SEMESTER CREDITS:** 4 (3 Lecture, 1 Laboratory)

**FACULTY:**

**E-MAIL:**

**OFFICE LOCATION:**

**OFFICE HOURS:**

**COURSE DESCRIPTION:** This course provides an introduction to human anatomy. Included are fundamental overviews of: biology and anatomy as they pertain to the human body. This course serves as a primer for students who are seeking to develop a foundational understanding of these objectives, and create an interest for confidently taking future Human Biology courses. Students pursuing degrees or certificates in certain health-related professions also benefit from the knowledge and useful daily skills provided by this course.

Weekly: 5 hours includes lab.

**COURSE GOALS:** Upon completion of the course the successful student will, by written tests, be able to:

- Use the Scientific Method of Taxonomy for identifying human anatomical structures
- Spell and define associated terminology.
- Use pre-established taxonomies as fundamental scientific method for studying human anatomy.
- Identify anatomical structures and landmarks of the human body.
- Demonstrate how the 6 Levels of Structural Organization apply to each bodily, organ system.
- Explain the structural inter-relationships of the organ systems.

**Bio H-108 Basic Anatomy: Objectives and Outcomes for Laboratory & Lecture**

1. Student demonstrates an understanding of the structural organization of the human body by identifying:

- 6 Levels of Structural Hierarchy
- Anatomical and Directional Terminology
- Body Orientation and Planes
- Bodily Regions
- Body Cavities
- Abdominal Regions

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

2. Student demonstrates an understanding of the basic human cell structure , including:

- Visual Identification of the Three Main Parts of the Cell (generic)
- Visual Identification of Organelles
- Basic Functions
- Form Function Relationships
- Cellular Specializations
- Cell Shapes

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

3. Student demonstrates an understanding of the Basic Tissues of the body, including:

- Four Types of Base Tissues
- Structural and Functional Types
- Visual Identification
- Cells and Matrix
- Membranes

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

4. Student demonstrates an understanding of the Integumentary System; including:

- Structure of the Skin
- Skin Color
- Appendages of the Skin

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

5. Student demonstrates an understanding of the Skeletal System of the body by using scientific method of taxonomy to identify:

- Micro-anatomy of the 2 main structural types of bone tissue and its cells, and molecular make-up of the extra-cellular matrix.
- Four Types of Bones
- Macro-Anatomy of Long Bone (generic parts)
- Bones of Adult Skeleton by Divisions
- Bones and Joints of the Skull
- Bones and Joints of the Vertebral Column and Thoracic Cage
- Bones and Joints of the Pectoral Girdle and Upper Limb
- Bones and Joints of the Pelvic Girdle and lower Limb

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

6. Student demonstrates an understanding of the Joint Types, and Movements by using the scientific method of taxonomy to identify:

- Structural Classification of Joints
- Synovial Joint Types
- Structures of Knee Joint
- Joint Movements by Plane

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

7. Student demonstrates an understanding of the Muscular System of the body by using the scientific method of taxonomy to identify:

- Muscle Structures (mysia and fascia)
- Musclular Assignments (origin & insertion bones/joints, action, roles)
- Muscle Naming Schemes
- Head and neck Muscles
- Trunk Muscles
- Upper Limb Muscles
- Lower Limb Muscles

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

8. Student demonstrates an understanding of the Nervous System of the body by using scientific method of taxonomy for:

- Identification of the Divisions of the Nervous System
- Identification of Spinal Cord Structures
- Identification of Spinal Nerve Structures
- Identification of the Parts of Spinal Reflex Arc
- Identification of Basic Brain Structures

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

9. Student demonstrates an understanding of the Special Senses of the body by using scientific method of taxonomy for:

- Identification of Basic Ear Structures (for hearing and balance)
- Identification of Basic Eye Structures

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

10. Student demonstrates an understanding of the Endocrine System of the body by using scientific method of taxonomy for:
- Identification of Basic Endocrine Organs
- Identification of Basic Endocrine Organ hormones and functions.

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

11. Student demonstrates an understanding of the Heart by using scientific method of taxonomy for:
- Identification of Heart Structures (chamber and valves)
- Identification of Great Vessels of the Heart
- Identification of Heart's Pacemaker and Conduction Structures

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

12. Student demonstrates an understanding of the Vascular System of the body by using scientific method of taxonomy for:
- Identification of Vessel Structure
- Differentiation of Arteries, Veins, Capillaries
- Identification of Circulatory Routes
- Identification of specific Principal Arteries and Veins

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

13. Student demonstrates an understanding of Blood by using scientific method of taxonomy for:
- Identification of Basic Blood elements
- Identification of Basic Blood elements functions

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

14. Student demonstrates an understanding of the Respiratory System of the body by using scientific method of taxonomy for:

- Identification of Structures of the Upper Respiratory Tract
- Identification of Basic Structures of the Lower Respiratory Tract
- Identification of Pulmonary Ventilation Muscles

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

15. Student demonstrates an understanding of the Urinary System of the body using scientific method of taxonomy for:

- Identification of Basic Kidney Structures
- Identification of Basic Nephron Structures
- Identification of Ureters, Urinary Bladder, Urethra

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

16. Student demonstrates an understanding of the Digestive System of the body using scientific method of taxonomy for:

- Identification of Oral and Esophageal Structures
- Identification of Basic Stomach Structures
- Identification of Basic Small Intestine Structures
- Identification of Basic Large Intestine Structures
- Identification of Basic: Liver, Pancreas, Gall Bladder

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

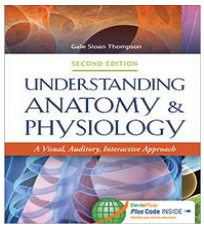
17. Student demonstrates an understanding of the Reproductive Systems of the body,by using scientific method of taxonomy for:

- Identification of Basic Male Reproductive Anatomy (primary and secondary sex organs)
- Identification of Basic Female Reproductive Anatomy (primary and secondary sex organs)

as covered in Lecture and demonstrated by the Instructor during Lab, by passing a written examination of about one hour in length. Passing requires scoring an average minimum score of no less than 60% over the course's 5 examinations; as well as completing workbook assignments and lab assignments, as outlined in course syllabus.

**CLASS MEETING TIMES:** M & W 3:00-5:20 **LOCATION:** T. B. D.

**REQUIRED TEXTS:** "Understanding Anatomy & Physiology. A Visual, Auditory, Interactive Approach." Gale Sloan Thompson. Second Edition, and get the companion Workbook too!!!!!!!!




**GRADING:**

Earning Credit: The grade for the course is determined by written assessments: a combination of chapter specific workbook assignments, and written examinations. There are a total of 20 Workbook assignments, 4 each mid-term exams and a final exam. Students must complete the assigned 20 each chapters of Workbook assignments (due upon request without notice), worth a total of **20 points**. The 4 each Mid-term Exams are worth 50 points each, for a total of **150 points**; and the Final Exam is worth **100 points**.

This offers a possible **total of 320 points**. Final, passing grade/scoring for the course is solely based upon the student's percentage of these possible 320 points. Students must have a minimum final total of 190 points (59.5%) to pass the course.

**Exam Scoring / Final Grading**

A = 90-100%

B = 80-89.4%

C = 70-79.4%

D = 60-69.4%

F = 0-59.4%

**Point Breakdown**

Assignments =20 points

4 Mid-Term Exams = 200 Points

Final Exam = 100 points

**Total Possible = 320 points**

**ATTENDANCE and MAKE-UPS:**
Attending all classes is critical to learning the course material; therefore, they are best attended without missing any. For an absence to be excused, Students must contact the instructor (using UM email,) in advance of any absence, to discuss & plan for the possible academic outcomes. Students are also required to take the mid-term & final exams during the scheduled time, unless pre-arranged with instructor's approval. All make-ups must be satisfied within one week of absence.

**ACADEMIC CONDUCT:**
All students must practice academic honesty. Academic misconduct is subject to academic penalty by disciplinary sanction from the University of Montana. All students need to be familiar with the Student Conduct Code. The Code is available online at:
The Link to Student Conduct Code is http://www.umt.edu/sa/upsa/index.cfm/page/1321

**STUDENTS WITH DISABILITIES:**
Students with disabilities may request reasonable modifications by contacting your instructor. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). "Reasonable" means the University permits no fundamental alterations of academic standards or retroactive modifications. For more information, please consult Link to Disability Student Services website is http://www.umt.edu/dss/